

Amendments to the Specification:

Please replace the paragraph starting at page 7, line 11, with the following replacement paragraph:

The present invention provides a technique for label selection for an MPLS end-to-end optical path 16 across the communications network 2 between a source node 10a and a destination node 10b via one or more intervening cross connects 4. The path 16 is divided into hops 18, each of which is served by a respective node (e.g., the source node 10a of a cross-connect 4) connected at the up-stream end of the hop 18. In a WDM (or DWDM) environment, the label assigned to each label switched packet (LSP), for each hop 18, is the channel (wavelength) used for conveying the LSP through the hop. In other words, the label designates the wavelength on which the path 16 traverses the hop 18. In the example illustrated in FIGS. 1 and 3, the source and destination nodes 10a and 10b are located at respective edge nodes, and two intervening cross-connects ~~[[1a]]~~ 4a and 4b are incorporated into the path 16. One or both of the cross connects 4a, b may be non-agile, so that label (thus wavelength) conversion between hops (i.e. within a cross-connect 4) may not be possible. Thus in accordance with the present invention, a common label is selected such that the label switched end-to-end optical path 16 using the common label (wavelength) can be mapped across the communications network 2.

Please replace the paragraph starting at page 8, line 3, with the following replacement paragraph:

FIG. 2 is a block diagram schematically illustrating the principal elements of a cross-connect 4 of the optical network. As shown in FIG. 2, the cross-connect 4 includes at least one input port 20; at least one output port 22; a switch 24 (which may be an optical space switch) capable of providing a signal path between respective input and output ports 20, 22; a controller 26 for controlling operation of the cross-connect 4; and a label availability table 28, which may be co-resident with the cross-connect 4 ~~[[of]]~~ or

located at a remote site and accessible by the controller 26. The controller 26 can be provided with a buffer (not shown) for temporarily storing information.

Please replace the paragraph starting at page 10, line 20, with the following replacement paragraph:

Upon receipt of the request message R, the first cross-connect 4a extracts the label list 32 and compares it with its associated label availability table 28a (step 104). The first cross-connect 4b performs this comparison operation by calculating the intersection between the set of labels identified in the label list 32 and the set of labels available for the next hop 18b of the path 16, as indicated by the label availability table 28a. The intersection set resulting from this analysis is the set of label identifiers corresponding to labels which are available for use over the first two hops 18a, b of the path 16, this intersection set is then inserted into the request message R as a reduced label list 34, and the request message R is forwarded on to the second cross-connect 4b (step 106).

Please replace the paragraph starting at page 11, line 14, with the following replacement paragraph:

It will be appreciated that this process of receiving the request message R; extracting the label list, and calculating the intersection of the label list and the set of available label identifiers in an associated label availability table 28 can be repeated (over any number of hops 18) until the reduced label list is empty or the request message (containing a non-empty label list) is forwarded to the destination node 10b. At any cross-connect 4 if the reduced label list is found to be empty, then a request rejection message (not shown) can be generated and sent back to the source node 10a to indicate that no labels are available for the end-to-end path 16).